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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/420,787 | 10/19/1999 | TED DANIELS | M3850.0029/P | 3297 |
| 25096 | 7590 | 01/14/2004 | EXAMINER | |
| PERKINS COIE LLP | | | CHOW, DOON Y | |
| PATENT-SEA | | | ART UNIT | |
| P.O. BOX 1247 | | | 2675 | |
| SEATTLE, WA 98111-1247 | | | PAPER NUMBER | |

DATE MAILED: 01/14/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/420,787

Applicant(s)

DANIELS, TED

Examiner

Dennis-Doon Chow

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4,6-16,18-24,26-28 and 31-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4,6-16,18-24,26-28 and 31-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-4, 6-13, 15-16 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al. (5400213) in view of Yang et al. (6304250), Merkel (5510953) and Kim (5955797).

Honda discloses a portable personal computer, comprising: a base having a controller for controlling operations thereof; a display attached to the base; and a removable keyboard for communicating with the controller in the base through a signal interface when mounted into or removed from the base (see Figs. 1-2).

Honda does not disclose the signal interface being wireless.

Yang, in the same input field, discloses a keyboard device communicates to a computer device by either a hardwire or wireless communication. The keyboard device comprises a rechargeable battery for powering the keyboard device when the keyboard is operated in the wireless communication. The compute device supplies power to recharge the rechargeable battery when the hardwire communication.

It would have been obvious to one of ordinary skill in the art to substitute Yang's wireless connection for Honda's hardwired connection because Yang teaches both

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wireless and hardwired connection can be used. By using the wireless connection, keyboard can be moved around freely.

Honda does not explicitly disclose using the recess for receiving one side surface of the keyboard.

Merkel, in the same input field, discloses a mounting structure for mounting a removable keyboard into a computer base unit. The structure comprises a recess for receiving a side surface of the keyboard.

It would have been obvious to one of ordinary skill in the art to use the Merkel's concept in Honda's invention because Merkel's mounting structure is very simple and it is ease to make.

The modified Honda does not explicitly disclose recharging the battery using an AC adaptor. However, using AC adapter for recharging a rechargeable battery from an external power source is well known in the art as shown by Kim. Therefore, it would have been obvious to one of ordinary skill in the art to use Kim's AC adaptor for recharging Yang's rechargeable battery in the invention of the modified Honda. This would have been obvious because the AC adaptor allows the rechargeable battery to be recharged without turning the computer device.

Regarding claims 6-8, using a pointing device such a track ball or a touch pad in the keyboard is well known in the art.

Regarding to claims 11 and 15, using a radio frequency connection instead of the infrared connection in the wireless communication is well known in the art.

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3. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al. in view of Yang et al., Merkel and Kim as applied to claims 2-4, 6-13, 15-16 and 18-21 above, and further in view of Brusky et al. (5903259).

The modified Honda does not disclose using two infrared devices.

Brusky, in the same input art, discloses using more than one infrared devices for transmitting infrared signals from a remote keyboard to a computer base unit (see Fig. 2), wherein each of the infrared devices is located in each side of the keyboard.

It would have been obvious to one of ordinary skill in the art to use Brusky's infrared devices in the invention of the modified Honda because more infrared devices provide better transmission.

4. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al. in view of Yang et al., Merkel and Kim as applied to claims 2-4, 6-13, 15-16 and 18-21 above, and further in view of Klein et al (6205021).

The modified Honda does not disclose the use of a spring ball bearing.

Klein, in the same input art, discloses a mounting structure for mounting an input device into a computer base unit. The mounting structure comprises a spring ball bearing (38 Fig. 5).

It would have been obvious to one of ordinary skill in the art to use Klein's spring ball bearing in the invention of the modified Honda. By doing so, a good contact can be created between the keyboard and the base.

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5. Claims 26, 28, and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al. (5400213) in view of Yang et al. and Kim.

Honda discloses a portable personal computer, comprising: a base having a controller for controlling operations thereof; a display attached to the base; and a removable keyboard for communicating with the controller in the base through a signal interface when mounted into or removed from the base (see Figs. 1-2).

Honda does not disclose the signal interface being wireless.

Yang, in the same input field, discloses a keyboard device communicates to a computer device by either a hardwire or wireless communication. The keyboard device comprises a rechargeable battery for powering the keyboard device when the keyboard is operated in the wireless communication. The compute device supplies power to recharge the rechargeable battery when the hardwire communication.

It would have been obvious to one of ordinary skill in the art to substitute Yang's wireless connection for Honda's hardwired connection because Yang teaches both wireless and hardwired connection can be used. By using the wireless connection, keyboard can be moved around freely.

The modified Honda does not explicitly disclose recharging the battery using an AC adaptor. However, using AC adapter for recharging a rechargeable battery from an external power source is well known in the art as shown by Kim. Therefore, it would have been obvious to one of ordinary skill in the art to use Kim's AC adaptor for recharging Yang's rechargeable battery in the invention of the modified Honda. This

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would have been obvious because the AC adaptor allows the rechargeable battery to be recharged without turning the computer device.

6. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al. in view of Yang et al. and Kim as applied to claims 26, 28, and 30-33 above, and further in view of Brusky et al. (5903259).

The modified Honda does not disclose using two infrared devices.

Brusky, in the same input art, discloses using more than one infrared devices for transmitting infrared signals from a remote keyboard to a computer base unit (see Fig. 2), wherein each of the infrared devices is located in each side of the keyboard.

It would have been obvious to one of ordinary skill in the art to use Brusky's infrared devices in the invention of the modified Honda because more infrared devices provide better transmission.

7. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al. in view of Yang et al. and Kim as applied to claims 26, 28, and 30-33 above, and further in view of Klein et al (6205021).

The modified Honda does not disclose the use of a spring ball bearing.

Klein, in the same input art, discloses a mounting structure for mounting an input device into a computer base unit. The mounting structure comprises a spring ball bearing (38 Fig. 5).

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It would have been obvious to one of ordinary skill in the art to use Klein's spring ball bearing in the invention of the modified Honda. By doing so, a good contact can be created between the keyboard and the base.

Response to Arguments

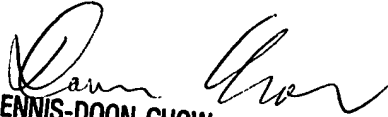
8. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis-Doon Chow whose telephone number is 703-305-4398. The examiner can normally be reached on 8:30-6:00, Alternate Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras can be reached on 703-305-9720. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

D. Chow
January 11, 2004


DENNIS-DOON CHOW
PRIMARY EXAMINER